

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of recovering a dropped call in a mobile station, comprising the steps of:

determining whether two consecutive good frames have been received on a traffic channel that was disconnected to determine if the disconnected traffic channel has been recovered when the dropped call occurs;

searching an adjacent base station whose pilot signal arrives at the mobile station with a greater received signal strength using a searcher, at the same time said determining step is performed;

requesting a traffic channel to the searched base station so that the traffic channel is assigned to the mobile station, using a physical channel used for data transmission service;

~~determining a first available traffic channel between a recovered traffic channel and the assigned traffic channel~~ determining which one of the following occurs first:

(a) receiving two consecutive good frames through the disconnected traffic channel and recovering the disconnected traffic channel, and

(b) assigning the traffic channel from the searched base station to the mobile station; and

shortening call recovery time by resuming the call on the traffic channel that is first available between the recovered traffic channel and the assigned traffic channel according to the determination result.

2. (Original) The method of claim 1, wherein the traffic channels are fundamental channels.

3. (Previously Presented) The method of claim 1, wherein the physical channel for data transmission service is a supplemental channel.

4. (Previously Presented) The method of claim 1, wherein the physical channel for data transmission service is a common control channel.

5. (Currently Amended) A method of recovering a dropped call in a mobile station, comprising the steps of:

determining whether a predetermined number of good frames have been received on a traffic channel that was disconnected to determine if the disconnected traffic channel has been recovered when the dropped call occurs;

assigning to the mobile station a traffic channel by an adjacent base station with a greater received signal strength using a supplemental channel, while said determining step is performed;

~~determining a first available traffic channel between a recovered traffic channel and the assigned traffic channel~~ determining which one of the following occurs first:

(a) receiving two consecutive good frames through the disconnected traffic channel and recovering the disconnected traffic channel, and

(b) assigning the traffic channel from the searched base station to the mobile station; and

shortening call recovery time by resuming the call on the traffic channel that is first available between the recovered traffic channel and the assigned traffic channel according to the determination result.

6-7. (Cancelled)

8. (Currently Amended) A method of recovering a dropped call in a mobile station, comprising the steps of:

awaiting recovery of the dropped call while determining whether two consecutive good frames have been received on a traffic channel that was disconnected when the dropped call occurs;

searching for an adjacent base station whose pilot signal arrives at the mobile station with a greater received signal strength using a searcher while the awaiting step is performed;

assigning to the mobile station a traffic channel by the searched base station using a physical channel used for data transmission service;

~~determining a first available traffic channel between a recovered traffic channel and the assigned traffic channel~~ determining which one of the following occurs first:

(a) receiving two consecutive good frames through the disconnected traffic channel and recovering the disconnected traffic channel, and

(b) assigning the traffic channel from the searched base station to the mobile station; and

shortening call recovery time by resuming the call on the traffic channel that is first available between the recovered traffic channel and the assigned traffic channel according to the determination result.

9. (Previously Presented) The method of claim 8, wherein the physical channel for data transmission service is one of a supplemental channel and a common control channel.

10. (Currently Amended) A method of recovering a dropped call in a mobile station, comprising the steps of:

dropping a call after receipt of a first predetermined number of consecutive bad frames on a fundamental channel;

determining whether a second predetermined number of consecutive good frames have been received on the fundamental channel that was disconnected to determine if the disconnected traffic channel has been recovered when the dropped call occurs;

searching for an adjacent base station whose pilot signal arrives at the mobile station with a greater received signal strength using a searcher, while said determining step is performed;

acquiring system information by receiving and demodulating a sync channel from the searched base station;

requesting a traffic channel to the searched base station so that the traffic channel is assigned to the mobile station;

~~determining a first available traffic channel between a recovered traffic channel and the assigned traffic channel~~ determining which one of the following occurs first:

(a) receiving two consecutive good frames through the disconnected traffic channel and recovering the disconnected traffic channel, and

(b) assigning the traffic channel from the searched base station to the mobile station; and

shortening call recovery time by resuming the call on the channel that is first available between the recovered fundamental channel and the assigned traffic channel according to the determination result.

11. (Currently Amended) A method of recovering a dropped call in a mobile station, comprising the steps of:

determining whether two consecutive good frames have been received on a traffic channel that was disconnected in relation to the dropped call;

searching an adjacent base station whose signal arrives at the mobile station with a greater received signal strength using a searcher, while the frame receipt is checked;

requesting a traffic channel, at mobile station, to the searched base station;

assigning to the mobile station a traffic channel by the searched base station using a physical channel used for data transmission;

~~determining a first available traffic channel between a recovered traffic channel and the assigned traffic channel~~ determining which one of the following occurs first:

(a) receiving two consecutive good frames through the disconnected traffic channel and recovering the disconnected traffic channel, and

(b) assigning the traffic channel from the searched base station to the mobile station; and

shortening call recovery time by resuming the call on the channel that is first available between the recovered traffic channel and the assigned traffic channel according to the determination result.